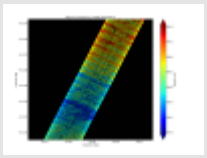
DC-8 10/24/16 - 10/25/16

Aircraft: DC-8 - AFRC (See full schedule)
Flight Number: 1145
Payload Configuration: OIB-ATM NAV/ATM GPS/ATM-T5/T6/ATM FLIR/ATM CAMBOT MCoRDS/SNOW/Ku RADAR DMS/POS-AV GP
Nav Data Collected: Yes
Total Flight Time: 11.5 hours
Submitted by: Chris Jennison on 10/27/16
Flight Segments:

From:	SCCI	**To:**	SCCI
Start:	10/24/16 13:26 Z	**Finish:**	10/25/16 00:56 Z
Flight Time:	11.5 hours		
Log Number:	178010	**PI:**	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Comments:	This was a first time survey flight for the DC-8 of the Recovery Channel 01 ice formation. We are told that it is so-named by the British Antarctic Survey because their sledges kept getting lost down crevasses forcing them to be recovered. This was a clear weather flight and typical of the amount of data each instrument records. The MiniRad form Colorado University flew for the first time and seemed to operate well. Data recorded: ATM T5 16GB, T6 17GB, CamBot 9GB, FLIR 15GB Ku radar 327GB, Snow radar 327GB, MCoRDS 907GB Gravimeter 5GB MiniRad 1GB		

Images:

ATM AT6 data sample



Read more

Flight Hour Summary:

	178010
Flight Hours Approved in SOFRS	300
Total Used	306.9
Total Remaining	-6.9

178010 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
10/04/16	1135	Science	4	4	296	
10/05/16	1136	Science	2.7	6.7	293.3	
10/12/16	1138	Transit	10.9	17.6	282.4	
10/12/16	1139	Transit	3	20.6	279.4	
10/14/16 - 10/15/16	1140	Science	10.9	31.5	268.5	
10/15/16 - 10/16/16	1141	Science	11.8	43.3	256.7	
10/17/16 - 10/18/16	1142	Science	11.8	55.1	244.9	
10/20/16 - 10/21/16	1143	Science	11.4	66.5	233.5	
10/22/16	1144	Science	11	77.5	222.5	

10/24/16 - 10/25/16	1145	Science	11.5	89	211
10/25/16 - 10/26/16	1146	Science	11.3	100.3	199.7
10/26/16 - 10/27/16	1147	Science	12.1	112.4	187.6
10/27/16 - 10/28/16	1148	Science	11.5	123.9	176.1
10/28/16 - 10/29/16	1149	Science	11	134.9	165.1
10/31/16 - 11/01/16	1150	Science	11	145.9	154.1
11/02/16 - 11/03/16	1151	Science	11.2	157.1	142.9
11/03/16 - 11/04/16	1152	Science	11.5	168.6	131.4
11/04/16 - 11/05/16	1153	Science	11.1	179.7	120.3
11/05/16 - 11/06/16	1154	Science	11.7	191.4	108.6
11/07/16 - 11/08/16	1155	Science	11.2	202.6	97.4
11/09/16 - 11/10/16	1156	Science	11.7	214.3	85.7
11/10/16	1157	Science	10.9	225.2	74.8
11/11/16 - 11/12/16	1158	Science	11.3	236.5	63.5
11/12/16 - 11/13/16	1159	Science	11.1	247.6	52.4
11/14/16	1160	Science	10.9	258.5	41.5
11/15/16 - 11/16/16	1161	Science	11.6	270.1	29.9
11/17/16 - 11/18/16	1162	Science	11.1	281.2	18.8
11/18/16 - 11/19/16	1163	Science	11.1	292.3	7.7
11/21/16	1165	Transit	11.6	303.9	-3.9
11/21/16	1164	Transit	3	306.9	-6.9

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

Related Science Report:

OIB - DC-8 10/24/16 Science Report

Mission: OIB

Mission Summary:

This was a very successful flight of the Recovery Channel 1 mission with no loss of data due to clouds or other instrument issues. This low priority mission was chosen due to the poor weather present over higher priority target areas. The flight is a repeat of the identical 18 October 2012 flight and was last flown in 2014, its purpose is to obtain dh/dt measurements of Recovery Glacier. The mission is primarily designed along ICESat-1 ground tracks and also incorporates a crossing of the tributary channel entering the main Recovery channel from the west.

Take-off today was slightly delayed to account for airport construction as well as a short maintenance test by the air crew, but these did not affect our survey time. The ATM Applanix system appeared to function normally this

flight, in contrast to a still unknown issue which affected previous flights. Redundant systems are on board such that no problems have been caused by this yet, but a spare Applanix unit will soon be uploaded to minimize the likelihood of any further problems.

Lastly, a piggyback microwave radiometer instrument called MiniRad was flown on this mission and looked to have successfully collected about 1 Gb of data, the team will analyze this data to test operation of the instrument.

Data volumes
ATM: T5: 16 Gb T6: 17 Gb
FLIR: 15 Gb
Cambot: 9 Gb
DMS: 37.5 Gb
Snow/Ku radars: 327 Gb each
MCoRDS: 907 Gb
AIRGrav: 5 Gb
data on: 1732
data off: 2030

File:
flight_map_recovery.pdf
Submitted by: Nathan T. Kurtz on 10/25/16

Page Last Updated: April 22, 2017

Page Editor: Brad Bulger

NASA Official: Bruce A. Tagg
